## REMARKS

The Office Action dated May 30, 2008 has been received and carefully noted. The above amendments to the claims, abstract, and the following remarks, are submitted as a full and complete response thereto.

Claims 36-69 and 71-72 are pending in the application. Claims 36-69 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claim 70 has been canceled without prejudice or disclaimer. Claims 71-72 have been added. No new matter is added. Applicant submits the pending claims for consideration in view of the following.

### Allowable Claims

Claims 40 and 63-65 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant appreciatively acknowledges the examination of these claims.

### Specification Objection

The Office Action objected to the Abstract of the Specification for containing line numbers and for referencing a drawing. As indicated above, the Abstract has been amended in a manner that addresses this objection. Withdrawal of this objection is therefore respectfully requested.

**§112 Rejections, First Paragraph**

On page 2, the Office Action rejected claims 66-70 under 35 U.S.C. §112, first paragraph, for failing to comply with the enablement requirement. Applicant traverses this rejection on the grounds that the Office Action failed to make a proper enablement rejection and that claims 66-70 comply with the enablement requirement.

MPEP 2164 states that, "The enablement requirement refers to the requirement...that the specification describe how to make and how to use the invention...defined by the claim(s)." MPEP 2164.01 further clarifies the enablement requirement by indicating that the enablement requirement "has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without **undue experimentation**" (emphasis added). MPEP 2164.01(a) indicates that the factors to be considered for determining "undue experimentation" include the breadth of the claims, the nature of the invention, the state of the prior art, the level of one of ordinary skill, the level of predictability in the art, the amount of direction provided by the inventor, the existence of working examples, and the quality of experimentation needed to make or use the invention based on the content of the disclosure. Additionally, "[i]t is improper to conclude that a disclosure is not enabling based on an analysis of only one of the above factors while ignoring one or more of the others (MPEP 2164.01(a)). Rather, "[t]he examiner's analysis must consider

all the evidence related to each of these factors, and any conclusion of nonenablement must be based on the evidence as a whole" (*Id*).

Despite these requirements, the Office Action based the rejection on the sole grounds that the Specification allegedly "does not describe how to make or use the claimed network element." No other considerations are presented in the Office Action. Therefore, Applicant respectfully submits that the Office Action failed to make a proper enablement rejection under the first paragraph of 35 U.S.C. § 112. Withdrawal of this rejection is therefore respectfully requested for at least this reason.

Additionally, claims 66-69 comply with the enablement requirement. For example, Figures 4, 5, and 6, along with the description provided in the Specification of the present application, disclose specific examples of network nodes, communications, communication sequences, and data that would enable one skilled in the art to make and use the invention claimed in 66-69. Accordingly, the enablement requirement for claims 66-69 is satisfied by the Specification. Withdrawal of this rejection is therefore respectfully requested for at least this reason as well.

**§112 Rejections, Second Paragraph**

The Office Action also rejected claims 44-46, 48, 52-54, 56-57, 61, and 70 under 35 U.S.C. §112, second paragraph, as being indefinite. Applicant traverses these rejections as follows.

As for claims 44-46, 48, 52-54, 57, 61, and 70, the Office Action indicated that the phrase "and/or" renders the claims indefinite. As indicated above, Applicant has amended the claims in a manner that resolves the issue upon which this rejection is based. Withdrawal of these rejections is therefore respectfully requested.

As for claim 56, the Office Action alleged that the claimed "mechanism of coding and decoding" is unclear. Applicant respectfully asserts that the "mechanism of coding and decoding" is clear. The Federal Circuit has recently explained that the standard for indefiniteness is that the claim is "insolubly ambiguous." *Invotrogen Corp. v. Biocrest Manufacturing, L.P.* (Fed. Cir. Oct. 5, 2005); see also MPEP 2173.05(e). As there is nothing that is "insolubly ambiguous" regarding "mechanism of coding and decoding," claim 56 complies with the second paragraph of 35 U.S.C. § 112, especially in light of the disclosure provided by the Specification on pages 6-7 (i.e., at page 6, line 31, the term "coding/decoding mechanism" is explained by referring to a codec) and elsewhere. Withdrawal of this rejections is therefore respectfully requested.

As for claims 66-70, the Office Action alleged that the wherein clause that appears on line 29 of claim 66, renders claims 66-69 unclear. The Office Action stated that the claims are indefinite because they do not cite the particular component of the network element that performs the recited functionality. We propose traversing this rejection on the grounds that the Office Action has clearly conflated breadth with indefiniteness. As mentioned above, the Federal Circuit has recently explained that the standard for indefiniteness is that the claim is "insolubly ambiguous." *Id.* In claim 66, however, there

is nothing ambiguous: the particular component that performs the recited functionality is simply not recited. Therefore, claim 66 is not unclear, let alone "insolubly ambiguous." Withdrawal of this rejections is therefore respectfully requested.

As for claim 70, the Office Action alleged that the claim is indefinite because it does not recite any components that make up the system. As indicated above, claim 70 has been canceled. As such, the rejection of claim 70 is moot. Withdrawal of this rejections is therefore respectfully requested.

**§103(a) Rejection**

Claims 36-39, 41-44, 46-53, 55, 58-60 and 62 were rejected under 35 U.S.C. §103(a) as being unpatentable over Stumpert (US 6,947,747) in view of Farese et al. (US 4,996,685) and Kanter et al. ("An Open Service Architecture for Adaptive Personal Mobile Communication," Personal Communications, IEEE, vol. 8, no. 6, pp. 8-17, December 2001). The Office Action took the position that Stumpert fails to disclose all the limitations of the rejected claims, but that Farese and Kanter account for the deficiencies of Stumpert in a manner that renders the rejected claims obvious. Applicant respectfully asserts that a combination of Stumpert, Farese, and Kanter fails to disclose or suggest all the limitations of the rejected claims.

Claim 36, upon which claims 36-65 depend, is generally directed to a method that comprises establishing a first transmission path for user data related to a call, the first transmission path comprising a first access network, a first core network communicating

with the first access network, a second core network communicating with the first core network, and a second access network communicating with the second core network.

The method also comprises switching from the first transmission path to a second transmission path for the user data, the second transmission path comprising a direct connection between the first access network and the second access network. The method also comprises, before the establishing of the first transmission path for the user data, establishing a third transmission path for control data related to the call is performed. The method further comprises, before the switching from the first transmission path to the second transmission path for the user data, a handshake between at least one first access-network element involved in the first transmission path in the first access network and at least one second access-network element involved in the first transmission path in the second access network is performed. Additionally, the handshake may comprise providing from the at least one first access-network element to the at least one second access-network element first control information indicating that the direct transmission of user data between the first and second access networks is possible.

The foregoing claim recites limitations that are not disclosed or suggested by a combination of Stumpert, Farese, and Kanter.

Stumpert discloses a basic call setup for GSM/UMTS core networks. In Stumpert, a basic call setup for GSM/UMTS core networks, including supplementary services CFU, CFB, CFNREA, CFNRY, CW, HOLD and MPTY, includes transporting a Media Gateway address and logical point coding, and framing information in a forward

direction in cellular networks with separation of call control and bearer control (Abstract).

Farese discloses a technique for enabling a host computer to dynamically change an ISDN access path between a packet switched connection and a circuit switched connection during a session. In Farese, the host computer may be executing a host session with a user and may be connecting through an ISDN communications system. Additionally, the ISDN access path may connect the user to the host computer and may carry the host session. The Farese technique operates to provide a particular connection that is most suited to the communication requirements of a task currently being executed during a session by a host computer (Abstract).

Kanter discloses a characterization of properties of service architectures in relation to the steps taken in successive generations of wireless communication networks for personal communications. Kanter also discloses a novel service architecture for open communication in wireless Internet, describing its necessary properties and evaluating its merits. Kanter further discloses building an application prototype based on a service architecture (Abstract).

However, a combination of Stumpert, Farese, and Kanter fails to disclose or suggest all the limitations of the foregoing claim. For example, a combination of Stumpert, Farese, and Kanter fails to disclose or suggest "establishing a first transmission path for user data related to a call, said first transmission path comprising a first access network, a first core network communicating with said first access network, a second

core network communicating with said first core network, and a second access network communicating with said second core network; and switching from said first transmission path to a second transmission path for said user data, said second transmission path comprising a direct connection between said first access network and said second access network," as recited in claim 36.

The Office Action takes the position that the network structure of Stumpert can be understood, in the light of Kanter, as disclosing a bearer path, which includes a RNC in a first access network, a MGW in a core network, an ISP core network, and an internet core network. Additionally, the Office Action takes the position that Stumpert allows a bearer path to be established that directly connects one access network to another access network. In support of this position, the Office Action cites column 1, lines 60 to 63, of Stumpert, which states that "[o]nly one MGW is used if the core stays inside one network or goes over one network border. If the call goes over two network borders, then two MGWs are involved, each at the edge to the network." By no means does this paragraph of Stumpert disclose the establishment of a direct transmission path for user data between two access networks. Instead, Stumpert discloses that there is always at least one MGW of a core network that "is used" in the user plane routing.

Further, Stumpert does not differentiate between an indirect (first) transmission path for user data and a direct (second) transmission path for user data, as does the method of claim 36. Instead, Stumpert considers only one transmission path, which is described as "optimized" in comparison with the prior art. However, this does not

disclose "allowing for another bearer path (second transmission path) to be established that directly connects one access network to another access network," as alleged by the Office Action. Consequently, as the Office Action states on page 5, Stumpert fails to disclose the possibility of switching between two different transmission paths for user data. As a consequence, there simply is no "other" transmission path disclosed by Stumpert.

Recognizing this last mentioned deficiency of Stumpert, the Office Action additionally refers to the third reference, Farese. However, this document is concerned with dynamically switching a data connection between a user PC and a host computer between an ISDN a packet-switched connection and a circuit-switched connection, in order to provide a connection that is most suited to the communication requirements of a task currently being executed by the host computer. In Farese, the dynamic change is invoked by the host computer and is substantially transparent to the user (Abstract).

It should be noted that Farese is concerned with a technology that does not relate to the pertinent art of the claimed invention. Dynamically switching between packet- and circuit-switched connections is totally different from a switching of a transmission path from an indirect connection between access networks via a core network to a direct connection between the access networks. Even if Farese were to be considered relevant art in the context of the method of claim 1, a person of ordinary skill in the art would not combine the teachings because employing the dynamical-switching method of Farese would not allow switching from an indirect to a direct connection between access

networks, but a switching between packet-and circuit-switched connections. One would thus not arrive at the claimed method.

Furthermore, the examiner fails to provide any motivation to combine the teachings of Stumpert and Kanter with that of Farese. Instead, the Office Action merely states that one of ordinary sill in the art would combine the reference due to a very general interest of an "optimal communication environment." The Office Action provides no motivation that is specific to the references relied upon or the claimed invention. Consequently, the Office Action fails to provide any motivation to combine the teachings of Stumpert, Kanter, and Farese in a manner sufficient to support a rejection of the claims.

Accordingly, a combination of Stumpert, Farese, and Kanter fails to disclose or suggest all the limitations of claim 36. Additionally, a combination of Stumpert, Farese, and Kanter fails to disclose or suggest all the limitations of claims 37-39, 41-44, 46-53, 55, 58-60 and 62, for their dependency from claim 1, and for the patentable subject matter recited therein. Therefore, Applicant respectfully request that the rejection of claims 36-39, 41-44, 46-53, 55, 58-60 and 62 be withdrawn. Applicant also respectfully asserts the patentability of new claims 71-72 for similar reasons.

Claims 66-70 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nakashima et al (US 6,314,300), in view of Lescuyer et al. (US 2004/0038678). The Office Action took the position that Nakashima fails to disclose all the limitations of the rejected claims, but that Lescuyer account for the deficiencies of Nakashima in a manner

that renders the rejected claims obvious. Applicant respectfully asserts that a combination of Nakashima and Lescuyer fails to disclose or suggest all the limitations of the rejected claims.

Claim 66, upon which claims 67-69 depend, is generally directed to an apparatus that comprises at least one first interface configured to exchange control information and user data with a transceiver station and at least one second interface configured to exchange control information and user data with a first core-network. The apparatus also comprises a first call control unit connected to the first interface, and configured to establish, maintain and release across the first interface in relation to a call a first control-channel section for transmission of control information and a first user-channel section for transmission of user data, the first control- and user-channel sections having as endpoints the apparatus and the transceiver station. The apparatus further comprises a second call control unit connected to the first call control unit and connected to the second interface, configured to establish, maintain and release across the second interface in relation to the call a second control-channel section for transmission of control information and a second user-channel section for transmission of user data. The second control- and user-channel sections may have as endpoints the apparatus and a predetermined core-network element in the first core-network configured to establish, maintain and release across the first interface a third user channel-section for user data related to the call having as endpoints the apparatus and a second network element in the second access network, respectively. The apparatus may be configured to perform a

handshake directly between the apparatus and the second network element after establishing the second control channel section and before establishing the third user channel section, said handshake comprising providing from the first network element to the second network element first control information indicating that said direct transmission of user data between said first and second access networks is possible.

The foregoing claim recites limitations that are not disclosed or suggested by a combination of Nakashima and Lescuyer.

Nakashima discloses a mobile communication system capable of supporting multiple simultaneous communications on a single mobile terminal device, and collectively controlling all or a part of call states on a mobile terminal device. The system includes a mobile terminal device with a mobile terminal side call control unit for controlling calls at a mobile terminal side and a mobile terminal side mobile terminal management unit for managing a communication state of the mobile terminal device while identifying each mobile terminal side call control unit which is currently in communication. The system also includes a network device with network side call control units for controlling calls at a network side and a network side mobile terminal management unit, provided in correspondence to the mobile terminal device, for managing the communication state of the mobile terminal device and correspondences between said plurality of network side call control units and the mobile terminal device while identifying each network side call control unit which is currently in communication (Abstract).

Lescuyer discloses a cellular system comprising a network core including switches, subscriber management means, and a radio access network connected to the network core. The cellular system comprises base stations capable of radio communication with mobile stations comprising each a terminal associated with a subscriber identification module, for sending to the network core a warning message identifying a mobile station for which a dysfunction has been detected. In Lescuyer, when such a warning message identifying a mobile station is received, the network core queries the mobile station, so as to find out the identity of its terminal which is then recorded in a database of the network (Abstract).

However, a combination of Nakashima and Lescuyer fails to disclose or suggest, at least, "a first call control unit connected to said first interface, and configured to establish, maintain and release across said first interface in relation to a call a first control-channel section for transmission of control information and a first user-channel section for transmission of user data, said first control- and user-channel sections having as endpoints said apparatus and said transceiver station; and a second call control unit connected to said first call control unit and connected to said second interface, configured to establish, maintain and release across said second interface in relation to said call a second control-channel section for transmission of control information and a second user-channel section for transmission of user data, said second control- and user-channel sections having as endpoints said apparatus and a predetermined core-network element in said first core-network," as recited in claim 66.

The Office Action uses Nakashima only to show that a network device with an interface to a mobile terminal was known in the art. Lescuyer is then used to show that a network device may also have an interface to a core network. However, the Office Action fails to provide any evidence that the specific features of the network device of the network element of claim 66 are disclosed or suggested by Nakashima and Lescuyer. For example, there is no hint in these documents that a switching from an indirect to a direct transmission path between access networks is enabled. Nakashima is concerned with a mobile communication system for supporting multiple simultaneous communications on a single mobile terminal, and Lescuyer is concerned with a cellular radio communication system with means for locating faulty terminals.

Accordingly, a combination of Nakashima and Lescuyer fails to disclose or suggest all the limitations of claim 66. Additionally, a combination of Nakashima and Lescuyer fails to disclose or suggest all the limitations of claims Nakashima and Lescuyer for their dependency from claims 64-69, and for the patentable subject matter recited therein. Therefore, Applicant respectfully request that the rejection of claims 66-70 be withdrawn. Applicant also respectfully asserts the patentability of new claims 71-72 for similar reasons.

**Conclusion**

Applicant respectfully requests that the pending objections and rejections be withdrawn. If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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